Miami University: Interactive Design
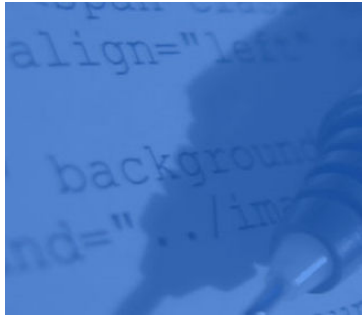
Course Number and Section: ART355 Interactive Design	
Term: Fall, 2009	**Meeting Time**: T/TH 5:30-8:30
	Location:
Instructor: Lindsay D. Grace	
Office Phone:	**Email**: LGrace@muohio.edu
Office Address: Hiestandt 206	**Support Site**: http://Miami.LGrace.com
Office Hours:2:00 pm – 5:00 pm Thursday and by appointment	

Course Overview:

This course is an opportunity to investigate interactive design as it relates to a variety media types. Using industry standard tools, students will learn to design, implement and refine interactive media for specific audiences. For the purpose of this class, interactive media includes websites, menu systems, and the variety of software and hardware solutions that intersect the domain of human-computer interaction.

Effective interactive design is often achieved by the creative application of sometimes disparate disciplines. Students should expect to incorporate their understanding of art theory, psychology, commercial business practice and good old fashioned creative problem solving.

Required Textbook:

HTML, XHTML, & CSS for the World Wide Web: Visual Quickstart Guide **6th edition**
Elizabeth Castro / Peachpit Press

Paperback: 456 pages
ISBN-10: 0321430840
ISBN-13: 978-0321430847

Students will also receive timely articles debating interactive design standards and practices as well as excerpts from standard texts (e.g. Don't Make Me Think).

Suggested Texts:

Social Science and Business:
Prioritizing Web Usability: Jakob Nielsen and Hao Loranger
ISBN 0-321-35031-6 - your industry and design guide text

Art and Industry:
Designing Interactions: Bill Moggridge
ISBN-10: 0262134748 – your art text

Science:
Designing Interfaces: Patterns for Effective Interaction Design
by Jenifer Tidwell – your design guide
ISBN: 0596008031

Required Materials

Reliable Storage Media: USB Drive or portable hard drive for in-class work
Access to Adobe Suite – CS4 (CS3 will suffice), Dreamweaver, Flash, Photoshop, Bridge

Estimated Homework Hours:

As always, learning a language (or 5 in this case) takes practice. Expect at least 3-6 hours a week.

Objectives:

Upon successful completion of this course, students should be able to:

- Write and edit HTML, CSS, and JavaScript code
- Optimize technical solutions for fluid design adjustments and appropriate response to user needs
- Identify, create, collect and organize assets appropriate to client standards
- Optimize a web design for search engines and specific technical needs (e.g. iPhone, Kiosk, etc)
- Use professional web authoring tools including Dreamweaver and Photoshop to produce websites and other interactive media
- Use and include Flash technology on a basic site
- Apply interface design principles to a variety of human-computer interaction environments
- Meet audience and client needs through considered research and inventive solutions
- Maintain a set of web pages on the Internet
- Apply usability standards including consideration for universal accesability
- Use existing web scripts and write basic web scripting code (Javascript)
- Identify and incorporate varied media assets in a web design (e.g. video, audio, games, etc)
- Understand how design and development dovetail to produce competent interactive media
- Understand and be able to draft a basic user task analysis
- Understand the framework under which a variety of web sites are produced (e.g. development, quality assurance, production pipeline, wireframes and mock ups)

	Topic(s)	Due dates
Aug. 24th **Week 1:**	Introduction **Development:** Making Sites - Client Server and the Browser - Language and Translation - HTML Coding introduced **Design:** Defining interaction - The feedback loop	**Read Introduction: pages 13-26** *Come to next week's class with a concept that can best be explained through interactivity – nothing to write, just be prepared to discuss in depth.* *URL Theme: "It must be/ must not be interactive"*
Sept. 31st **Week 2:**	**Development:** (X)HTML Fundamentals - Writing Code - Habits of highly Effective Coders – the semantic web - CSS Introduction **Design:** Its About People - Optimizing Use - Determining audience needs - Demo, Psycho, Techno	Chapter 1: 27-42 Chapter 2: 44-46 Chapter 3: 55-58, 64-65 **URL theme**: "Perfect/Imperfect harmony between technology and audience need"
Sept. 7th **Week 3:**	**Development**: (X)HTML Code Continued - Foundation tags. Extended tags. Syntax. - How to make life easy on yourself – CSS Introduction **Design**: Information Architecture	**Labor Day – Sept 7 – no class** Chapter 7: 119-124 **URL theme**: "The perfect/perfectly wrong information architecture"
Sept. 14th **Week 4:**	**Development**: CSS and Layout - Liquid, elastic, and static - Image tricks Lab time	**Project Assignment 1 due** (Thursday) – code a basic 5 page site "by hand" Chapter 8: 127-136 Chapter 11: 169-182 **NO URL Assignment this week**
Sept. 21st **Week 5:**	**Development and Design:** Web Graphics and Media. GIFs, JPGs, PNGS - Choosing graphic formats - Integrating other technologies and media - Flash and other plugins	Chapter 5: 81-102 *Come to next week's class with an elevator pitch – what kind of site would you like to make? Nothing to write, but be ready to present your pitch in 1-2 minutes – who, what, where, why, etc.* **URL Theme**: "The best/worst site concept I've ever experienced"
Sept. 28th **Week 6:**	**Development**: Dreamweaver - Forms - Plugins and instant JavaScript **Design**: Design for Devices	Chapter 12: 189-208 Chapter 17: 253-280 **URL Theme**: "A great/horrible experience on anything but a personal computer"

Oct. 5th **Week 7:**	**Development**: Dreamweaver Tips and Tricks **Design**: Web Genres and Aesthetic Style	Chapter 13: 199-208 Supplement on tips and tricks **URL Theme**: "For better or worse, a fascinating web aesthetic"
Oct. 12th **Week 8:**	Development Tools: Dreamweaver and Ajax	**No reading – think about design**
Oct. 19th **Week 9:**	JavaScript Primer Refining your interface: Site navigation. Continuity. Etc.	**Due – Project draft - wireframes, image mockups** Chapter 19: 311-320 Chapter 20: 321-326
Oct 26th **Week 10:**	AJAX and integration – Server Side Introduction	Scripting Supplement
Nov 2nd **Week 11:**	Sound, video	Chapter 18: 281-310
Nov 9th **Week 12:**	Flash Primer	Supplement on Flash
Nov 16th **Week 13:**	Web Publication: FTP and SEO	Chapter 22: 339 Chapter 24: 361-373
Nov 23rd **Week 14:**	Thanksgiving Break	**Site Beta Due** –in class critique – first day of week Reading: enjoy your break ☺
Nov 30th **Week 15:**	User Study and Task Analysis	Supplement on User Task Analysis
Dec 7th **Week 16:**	User Study lab	Supplement on User Task Analysis **Classes end**
Dec 14th **Week 17:**	Finals Week	Final site due

Grading System:

Point Score range	Letter Grade
93 and above	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
67-69	D+
63-66	D
Below 62	F

Score Breakdown:

- **Practice Assignments (traditional homework if needed): 5%**
- **"Handwork": Hand coded site: 15%**
- **Site spec and pitch: 20%**
- **Site Beta   30%**
- **Site Final   20%**
- **Participation (urls):   10%**

Course Requirements and Policies

All students must adhere to the guidelines set forth by the Miami University handbook.

Assignments

All assignments are due at the beginning of the class.

Students should provide a copy of their design work on clearly labeled CD. All assignments must be clearly labeled (filenames, correct file extensions, etc), and provided in a system folder with the students first and last name.

Students should always keep a backup copy of their work. Lost data or computer failures will are not excuses for poor or missing work.

No late assignments will be accepted. In this course, assignments build on the previous. Failure to complete prior assignments will make each subsequent assignment more difficult. It is in your best interest to complete each assignment on time and to the best of your ability. Always hand in what you have, even if it does not work. **Partial credit is better than no credit at all.**

Participation Grade (5%): URLS

Students are required to bring 2 URLS to each class. The first URL will exemplify good web page design and the other will demonstrate bad web design. Student are required to provide a new set of URLS each week. The URLS will help guide discussion and will count toward the 5% participation grade for each student. The URLS must contain generally innoffensive material.

Please provide the typed URLs on a sheet of paper with your name, date, the week number and a 3 or more clearly articulated bullet points as to why each site is well or poorly designed. For cull credit your language should incorporate concepts discussed in class. Students are responsible for providing URLS for weeks **two** through **eight** (six total assignments), as specified in the schedule. Please not the ULRs should reflect the URL theme stated.

This ongoing assignment is your opportunity to demonstrate a mastery of the basic design concepts discussed in class.

Attendance / Absences:

Students are expected to attend each class and arrive on time. Any student arriving late for an exam or quiz may not be given a chance to complete it.

Late assignments are not accepted unless they result from an excused absence. Excused absences are limited to documented medical emergencies and events for which the instructor has given approval. All students are expected to communicate planned or unplanned absence to the instructor's email as soon as possible.

Any student accruing more than a 20% unexcused absence rate will receive a full grade deduction. If, for example, a class meets 10 times during a semester, the students third absence will result in a best potential grade of "B." A student who accrues 30% or more unexcused absences will fail the course.

Makeup exams and acceptance of late assignments will only be granted in the following circumstances; Medical excuse, emergencies (as understood by Miami University Administration), campus-sponsored activities.

All planned absences should be clearly explained in an email sent to the instructor before the student misses the class. The instructor will reply indicating whether or not the absence is excused.

All issues of attendance and tardiness will be handled as school policy dictates and at the discretion of the instructor.

In Class Conduct:

In-class web surfing, email, electronic chat, text messaging, or related behavior is prohibited during class meetings. Please be attentive to people comments and engage yourself in class.

No recording (audio or visual) of this class may be made without the prior written consent of the instructor.

Statement of Community and Non-Discrimination: Miami University is committed to fostering a supportive learning environment for all students irrespective of individual differences in gender, race, national origin, religion, handicapping condition, sexual preference or age. Students should expect, and help create, a learning environment free from all forms of prejudice. If disrespectful behaviors occur in class, please seek the assistance of your instructor or the IMS director.

Disability Support

Students who have any disability, either permanent or temporary, which might affect their ability to perform in this class, are encouraged to inform me immediately." (If a student self-identifies, please contact the Rinella Learning Center (9-8741). Website: http://www.units.muohio.edu/saf/lrn/

Cheating and Plagiarism:

Any student that cheats or plagiarizes will be reported to the academic standards committee and may be dismissed from the course. A student may be considered in violation of cheating and plagiarism policy if they present the work of others as their own, even if the work is provided through multiple online and print resources. Much like a writing course, students involved in web scripting, programming and related activities should attribute their work by stating the resource from which the work was derived. This is common practice in industry. Examples of such attribution are provided below:

```
<!--An implementation of the "floating div alignment hack" as first offered
by Sarah Smith at CSSZenGarden.com on April 30, 2009-->

//Bubble Sort algorithm in Actionscript provided at
//http://mike.newgrounds.com/news/post/59329

/*  Derived from Craig Reynold's Boids Flocking Behavior as specified on pp.
48-52 of Great Game Algortyhms, ISBN 1233131321  */
```

All homework is to be completed independently (except when told otherwise). Any student who is caught or suspected of working in conjunction with any other student will be penalized. Using lines of code borrowed from any source other than the prescribed book for this course will be considered plagiarism unless the student clearly credit their source. Do not use websites, message boards, chat rooms, or other related resources to solve homework problems.

*Schedule subject to change based on student need and at the instructor's discretion.